

AD

NATIONAL FEDERATION
ASSOCIATION

A NATIONAL LEAGUE
AND

SIR LAUDER BRUNTON

(Consulting Physician)

MR. PRESIDENT, LADIES

I feel it is a very great
to address this assembly
for Physical Education
subject is one of the most
vital necessity to the well
of our country and Empire
so much to forward this
most of us are very happy
methods employed by them
the wisdom they have
turning their attention to
present are the grown-up
years hence, and later on
people, and in their hands
for good or for evil.
during the last few years
when he is old he will
the training of
ought to be of a thorough
(54)

ADDRESS

TO THE

NATIONAL FEDERATION OF HEAD TEACHERS'
ASSOCIATIONS AT CAMBRIDGE,

On January 5th, 1905.

A NATIONAL LEAGUE FOR PHYSICAL EDUCATION AND IMPROVEMENT.

BY

SIR LAUDER BRUNTON, LL.D., M.D., D.Sc., F.R.S.

(Consulting Physician to St. Bartholomew's Hospital, London.)

MR. PRESIDENT, LADIES AND GENTLEMEN,

I feel it is a very great honour and privilege to be allowed to address this assembly on the subject of a National League for Physical Education and Improvement. I feel that this subject is one of the utmost importance, one, I may say, of vital necessity to the welfare, nay, even to the very existence, of our country and Empire, and there is no class able to do so much to forward this scheme as school teachers. I think most of us are very far from approving the objects and methods employed by the Jesuits, but none of us can deny the wisdom they have shown in leaving adults alone and turning their attention to the children. The children of the present are the grown-up men and women of ten or twenty years hence, and later on they will become the elders of the people, and in their hands will lie the conduct of the country for good or for evil. "Train up a child in the way he should go," said the wise man, thousands of years ago, "and when he is old he will not depart from it." In your hands lies the training of the coming generation, and this training ought to be of a threefold character—mental, physical, and

moral. Some years ago the country awoke to the necessity of having mental training for every one of its citizens, and the Government insisted upon universal and compulsory education. Into your hands boys and girls of the rising generation are put, and you are required to teach them at least the rudiments of learning. But in making this demand upon you it seems to me that in many cases the Government of Great Britain has been imitating the conduct of Pharaoh of old, who demanded that his subjects should make bricks without straw, and you are required to turn out boys and girls up to a certain standard of learning when their feeble bodies and impoverished brains are incapable of assimilating the knowledge you impart. But how is this difficulty to be amended; how are the children to become stronger and better in body and mind so that they may learn? Here, again, when we try to answer this question we come back to the teachers. As shown by the report of the Inter-Departmental Committee on Physical Deterioration, three of the most potent factors for evil are (1) over-crowding, (2) alcoholism, and (3) insufficient or imperfect food; and it is in your hands, ladies and gentlemen, that the remedies for these evils in very great measure lie. The conditions of overcrowding may no doubt be lessened by legislative measures, but, as the report says, "the permanent difficulties that attach to the problem reside in the character of the people themselves, their feebleness and incompetence, their reluctance to move, their incapability of learning, and in the obstacle this presents to the best directed efforts on the part of the local authority to employ their powers." It is almost hopeless to deal with grown up people who present these qualities. You cannot remake them, and one's great hope lies in the next generation, in teaching the children while at school the benefits of fresh air, the necessity for ventilation, and the advantages of exercise.

MIGRATION FROM THE COUNTRY.

The overcrowding is partly, at least, consequent upon the great immigration from the country into towns. This is so great that, as the report says, "for every person who in 1851

lived in a town there are three at the present time." (Paragraph 80.) Although the health of towns has been greatly improved, the continuance of such immigration as this cannot but greatly increase overcrowding and its attendant evils. How, then, are we to lessen the urbanisation of the people and prevent immigration into the towns, or even, perhaps, bring some of the people back from the town into the country? In trying to answer such a question I think the easiest way is always to find out first of all why people leave the country for the town. The general inducements are, I believe, the hope of increased comfort in life, of easier or pleasanter work, of higher wages, of more comfortable surroundings, and of more amusement. There can be no doubt that there is a good deal of discomfort connected with farm work, especially in winter, when the labourers have to rise in the dark and cold, to go out whatever the weather may be, and not get back to their homes until it is dark again. When they do get home after a day of cold, wet, and discomfort, their homes leave often much to be desired. Their houses are often not only small, but in bad repair and uncomfortable; the evening meal is not only of poor quality but badly cooked; and instead of being able, like their town brethren, to go into a well-lighted, well-warmed and comfortable reading-room like that of a public library, where they can see newspapers, periodicals, and books, or where they can have lectures which amuse and interest them, or talks with their neighbours on all sorts of subjects, there is nothing for them to do but either stay at home in their poor cottages or congregate in a public house. Such is the comparison which the country cottager draws between his own lot and that of a town workman, and he is naturally induced to leave the country. His expectations may not all be fulfilled. He may find when he gets to town that the hours of work are just as long as in the country, that the work may be just as hard, that the accommodation in town is no better, and that the only difference in his amusement is that instead of going every night to the public house he may get an occasional variety by going to the music hall or cheap theatre.

RETAIN IN THE COUNTRY.

The way to retain people in the country is to make life pleasanter for them, and this is to be done first of all by improving their comforts at home, and although the building and maintenance of cottages must be the duty of the landlord, yet the comfort depends more on the teachers of the rising generation than on anyone else. For here again it is the teachers who will be able to instruct the girls in their schools in all the details of home management, in the little niceties that with little or no added expense convert a hovel into a decent-looking cottage, and especially in the art of cooking from poor and cheap material such dishes as will produce a most pleasant and appetising meal. In this respect we have a great deal to learn from the French, who are, perhaps, the most economical people in Europe, and who, with a bit of tough meat which in this country would hardly be reckoned fit for cats' meat, with a few scraps of bread and the vegetables from their own garden, can produce a meal such as an epicure would be glad to sit down at. Nor must we despise the appetising nature of food and consider only its nutritive qualities, for the Russian physiologist Pavloff, to whom the Nobel prize for the most important discoveries in physiology has this year been awarded, has found that appetising food not only makes the mouth water, *i.e.*, increases the quantity of saliva in the mouth, but it increases also the secretion of all the digestive glands, and thus renders food that is appetising much more easily digested, while food better in itself, but not so attractive to the palate, is digested with difficulty. Our country people, as a rule, are not only ignorant of how to cook, but they do not know how to make the best of the small patch of garden ground that is attached to their country cottage. Here, again, we must fall back on the aid of the teacher, who will be able to tell them what vegetables they need most, which will give them the best return, what are the best varieties to choose, when these should be planted, and who will make them do it and show them what kind of care these need. Nor is it with the vegetables that his

instruction will stop. He may tell them also about the flowers they are to plant so as to ornament their cottage homes, and not only this, but he may show them the marvels of beauty that are to be found in the plants and flowers by the wayside, in the meadows and coppices, and on the banks of the streams. He may show them, in fact, all the wonders of country life, which, when properly seen, make the country so attractive. When I was a boy the lesson in one of my school books was the story of "Eyes and No Eyes." Two boys who had taken a walk on the same day and over the same ground described their experiences afterwards to their teacher. No Eyes had seen nothing attractive, and was simply glad to get over the distance, whilst Eyes had seen at every turn something to interest and charm him. Courses of such training are now being instituted, and we trust that they may become universal, for the teaching of children to use their eyes will also teach them to use their brains and lead them into new fields of knowledge as well as add to the enjoyment of every hour of their daily life. Such a training will do a good deal to lessen the monotony of work in the country, and will supply a certain amount of amusement during the day. A good deal more may probably be done by having for every village or hamlet some large room where the inhabitants may meet, and where they may have light and warmth, books and papers, non-intoxicating refreshments and occasional addresses, sometimes illustrated, perhaps, by magic lantern slides to supply them with the amusement for which they crave, and which is one of the inducements to make them migrate to the towns instead of staying in the country. And here, again, it is to the teacher that we must look for help, for where in country villages is there to be found a room which would accommodate the people except the schoolroom? Fifty years ago the parish schoolroom in Scotland was also the parish library, and a very good library it was; and I think it is not too much to look forward to the time when, in the absence of a village hall, the schoolroom may perform the useful function of helping the grown-ups as well as the children. But here, again, we must turn to the teacher. Many of the grown-ups at present would not care for a library, would not care much for addresses, and

would greatly prefer a pot of beer and a pipe to any magic lantern pictures that might be shown to them. It is to the coming generation that we must look for the men and women who will prefer the higher pleasures, and it is upon the teachers of the present that we depend to train them up to do so.

EFFECTS OF ALCOHOL.

The second great factor in deterioration is alcohol, and if the use of alcohol could be brought within proper limits, even if not entirely abolished, the benefit to the nation would be incalculable. But here, again, let us ask why people drink. Many, many years ago, in a temperance periodical called "The Adviser," I read the story of an old drunkard, who complained "the neighbours always speak of my drinking, but they never speak of my thirst." It is the craving for alcohol that drives men to take it, and this craving may be either mental or bodily, or a combination of both. Solomon was the first to describe the action of alcohol, and to point out that it was an anæsthetic both to the body and the mind. It is an anæsthetic to the body just as chloroform and ether are, although it must be taken in larger quantity than they, and a man falling under its influence does not feel the pain of physical injury. Solomon makes the drunkard say, "They beat me and I felt it not, I will seek it yet again," and the same author describes the mental anæsthetic effect in language that I cannot improve upon when he says, "Give wine to him that is of a heavy heart, and strong drink to him that is ready to perish, that he may drink and forget his misery." It is this anæsthetic action which renders a man oblivious for the time being to the cares that weigh upon him, the bills that are unpaid, the discomforts of home, the drudgery of his work, and the thousand and one ills of this life, and makes him rejoice for the time being in a condition which is to him a paradise, even although it be a fool's paradise, and although his enjoyment is to be followed by greater misery than before. It is to the teacher again that we must look to instruct the children in the evil effects of alcohol on the body, mind and estate. This is already done in France and Switzer-

land, where the effects of alcohol are not only shown to the pupils by large wall pictures of men drunk and broken down, but also by pictures and models of the liver and other organs which have been destroyed by alcoholic excess. Smoking, too—though in moderation it is not injurious, and, I believe, is very beneficial to grown-up people—is not good for growing children, and the disadvantages of it may well be pointed out by the teachers.

PERSONAL HYGIENE.

For instruction in other subjects of personal hygiene, too, we must look to the teacher. He must instruct the pupils that health to a poor man is more than money at the bank is to the rich, for upon it depends his livelihood as well as his happiness. He will instruct them in the care of the teeth, and how a worn-out lucifer match used as a toothpick at night may perhaps prevent many a toothache, and that by the avoidance of spitting and by taking very simple precautions the dreaded disease consumption may in the course of one generation be stamped out and become as rare in this country as leprosy is now. I was much struck by learning that in one of the small rock villages in the Riviera, perched on a high cliff, miles away from any other village, where the whole population probably did not exceed 200 souls, the schoolroom was provided with a large wall picture showing the tubercle bacillus and the ravages it works, so that the children may learn from their earliest years how this dreadful disease is propagated and how it may be stamped out. But in all such diseases as consumption two things are necessary for their development, viz., the seed and the soil, and however abundant the seeds of evil may be, the disease will not grow if the soil be unpropitious. As a writer in a medical journal very neatly pointed out, one of the best ways of illustrating the effect of disease germs is afforded by the parable of the sower and the seed, where some fall upon good ground, grow up and flourish as a crop of disease, while others fall upon hard ground and perish. In consumption hospitals, although the germs were no doubt freely enough distributed in the years that are gone, the nurses, who were

healthy people, hardly ever took the disease. Thus if we can increase the healthy development of our children they will not only be more fit for work of all kinds, but they will be more resistant to disease. Now, one of the greatest needs of a child is sleep. It is during sleep that nutrition and growth take place, and the younger the child the more sleep does it need as a rule. We sometimes speak of the unsleeping heart, but this is a total mistake. The heart of the adult sleeps 13 hours out of the 24, but the heart of the child probably does not sleep so much, at any rate during its waking hours; and therefore there is all the more need for the quiet hours of rest and unconsciousness in bed for the heart as well as the brain and the other organs of the child's body. It is, perhaps, difficult for the teacher to help in this matter directly, but perhaps this, as well as other conditions of health and other points bearing upon the development of the child upon the health of the house and allied questions might be brought home to the parents by having what was described at the International Congress for School Hygiene in Nuremberg last April, as "parents' afternoons or evenings," in which the parents of the children attending school assembled in the school house and could be told about the children's health and progress and how to help them on.

PHYSICAL TRAINING.

Another most powerful agency for helping development is physical training, which forms the proper complement to mental training, and this training ought to be threefold. It ought to develop (1) the muscles by which movements are executed; (2) the nerve centres in the cord and cerebral ganglia by which the movements are co-ordinated; and (3) the brain by which all the movements receive a purposive direction. For developing the muscles simple movements, such as those with light dumb-bells, wands, Indian clubs, and free gymnastic exercises are useful, and such movements also develop, although only to a slight extent, the power of co-ordinating the muscles together. But for higher co-ordination I doubt if there is anything so good as games of ball of all sort. We find from the paintings

on the tombs of the ancient Egyptians that such games were a favourite pastime with them, and I believe that all through the world's history games of ball have held a very high place as amongst the best for developing co-ordination. The chief difficulty about them is the space that is wanted. For example, a game of cricket is undoubtedly one of the very best means for developing co-ordination that could possibly be devised, but the space required to play it is very great in proportion to the number of players engaged. This renders it impossible to provide cricket for all the scholars at a school, at least in towns. I am, however, informed by Mr. C. B. Fry, the well-known athlete, that it is possible to gain almost all the advantages of cricket from games of ball played within a limited space, and such may very properly be introduced in all schools, even in town schools. There is no doubt, however, that if sufficient playgrounds could be provided for every school or for certain groups of schools, the benefit would be enormous, and I believe that the providing of proper playgrounds is almost as essential as providing a proper school-house. The question of how this is to be done I will touch upon later. The education of the brain for purposive movements is attained to a great extent by such games as cricket, because the players are obliged not only to throw, to strike, or to catch the ball, but to do so in accordance with definite rules, and the discipline of the cricket teams is as strict or stricter than that of a regiment. Its captain allows no shirking, no loafing, no inattention, and the work of every player must be thoroughly co-ordinated with that of every other. For teaching bodies of children ordinary movements, marching and drill are exceedingly useful, as the habit of prompt obedience and action together is thus learned. In Switzerland I found that the games are looked upon as being quite as important, or perhaps more important, than drill, and they are supervised by the teachers, who take care that the weaker, who might otherwise be driven to the wall, also have their fair share of the fun, and the lazy, who might be inclined to shirk, also have to take their full share. But what is a fair share for each boy? It is sometimes exceedingly difficult to say, because the attempt

to shirk play may really result from physical inability, and I have seen boys who have been forced to play in accordance with their apparent size and strength suffer from cardiac strain because their hearts were too weak for their overgrown bodies. But here the teachers and medical officers of schools can work hand in hand, and medical inspection will show how far physical exercise can be pushed with advantage and when it must be stopped to avert injury. With the aid of the medical officer it will be possible to classify the children according to their physical strength and regulate their games accordingly. This plan is carried out in the gymnasium at the University of Pennsylvania, where all the undergraduates are obliged to have courses of physical training. Previous to this they are subjected to medical examination, their weak and their strong points ascertained, and instead of their being allowed to take such exercises or to play such games as would unduly develop their strong points, perhaps to the detriment of their weak ones, they are subjected to such training as will strengthen their weak points and bring them up to the full standard of health.

MILITARY TRAINING.

And now we come to the question of military training in schools, a question upon which there is a considerable divergence of opinion. The nation, as a whole, has settled the question that it will not have conscription if it can possibly be avoided, and yet we are beginning to feel that with our enormous responsibilities and our small Army we are not in a position satisfactorily to maintain the security of the Empire. Perhaps we might not be able even to defend our own shores in the event of a coalition against us of some of the great Continental Powers. No doubt our Navy is the first barrier against invasion, and ought to be kept as strong as possible, but the man is proverbially a fool who puts all his eggs into one basket, and we ought not to rely upon our Navy alone. We ought to be fully competent to defend our shores against any invader in the event of unforeseen disaster occurring to our Navy, and in these days of submarines and torpedoes, who

can say what will happen? The Boer war showed us what can be done in the way of fighting by boys of fourteen who have been accustomed to handle a rifle all their lives, and there seems to be no reason why our boys should not be quite as ready and quite as able to fight, in case of need, as the Boer youths. We do not want any military *régime* in this country; we do not want to encourage a spirit of aggression; but we do want to be able to defend our homes and our families from possible invasion. Our nation is essentially a peaceful nation. We do not want to go to war with any foreign Power, and the way to avoid war is to prevent them from attacking us by preparing ourselves thoroughly for defence. Little children might be taught their drill with sticks and bits of ribbon—and I do attach a good deal of importance to the bit of ribbon—and as they grow older they should learn to shoot at miniature rifle ranges, which I think should be attached to their school, and the children should be encouraged to become proficient in marksmanship. Inter-scholastic competitions might be arranged both for marksmanship and drill, and once or twice a year, perhaps, all the schools in the district might have regular manoeuvres, so as to teach them what would be necessary in order to combine together for defence in case of foreign invasion. But all this physical training involves waste of muscle and waste of nerve on the part of children, and if they are not sufficiently fed even for their ordinary tasks it is obviously impossible that they can undertake physical training in addition.

PROPER FEEDING.

And this raises a most serious question, namely, the feeding of school children. The same ignorance and incapacity on the part of the mothers which prevents them from providing appetising meals for themselves and their husbands naturally affects the children in even greater measure, for children's appetites are apt to be more capricious and fastidious than those of grown-up people. In addition to this there are many of the poorest classes who can hardly provide sufficiency of food of any kind for their children. How, then, are these

difficulties to be met? First, by providing nutritious and appetising food at a cheap rate for the children of those who are ignorant and slovenly, but who are able to pay for the materials of a good meal, and only cannot or will not cook it properly. Secondly, by providing food for the children of those who are really unable to buy a sufficient quantity of food, to say nothing of its quality. With all diffidence I may suggest that both of these difficulties may to a certain extent be met by cooking classes attached to each school, at which the children not only cook but *eat* the meals. The quantity to be prepared every day would allow greater opportunities for all the girls to learn cooking. The food, which could be supplied at a small rate to those who could pay, would probably be more appetising than what they could bring with them from home, or perhaps even than they could obtain at home if they were able to go there between the school hours. There can be no doubt that pauperising the people by the provision of free meals is inadvisable, and whatever parents can pay for their children they ought to be made to pay; but the State has already determined that whether they will or not they must have education, and if the child is starved the whole provision which the State makes for its education is lost, so that it seems to me that if the parents will not feed the child it should be fed at school, and the authorities should come down upon the parents for recompense just as the authorities come down on the parents for allowing the child to remain away and lose the opportunities provided for its education. In cases where the parents cannot really afford to provide proper sustenance for the child it would probably be really cheaper in the end to feed it at the public expense. As my friend Dr. Eichholz has very clearly put it, if we feed these children while they are growing we now spend money, but if by so doing we enable them to grow into strong men and women, and to utilise the education which is given to them, we enable them in later years to earn their own livelihood, and very likely keep them and their children off the parish. We spend on them in their youth, but we save a good deal more than this expense in later years by keeping them off the rates. If a

town-bred boy were to go to the country and see a man casting wheat broadcast over a field he would be very apt to say, "What a wasteful man this is, throwing good wheat away which might have been ground up and made into food for a number of people"; yet anyone who knew about farming would say to him, "You are a fool; the wheat which is cast into the furrows is not waste. It will multiply itself twentyfold in the course of the year." I think it may be much the same with money expended on food for children who would otherwise be starved.

HELP OF TEACHERS.

There are yet other subjects which I might touch upon—continuation schools, technical training, and the great advantages to be gained by fostering the spirit of emulation, both amongst pupils and teachers; but I fear I have already trespassed too long upon your time. I have brought before you many things which you teachers, and you alone, can do, and I think I hear you say that I am worse than Pharaoh of old, because he insisted that when no straw was supplied to the worker the tale of bricks should not be diminished, but here I come and ask you to do a great many new things, and thus add to the burdens which you have to bear, and which are already too great. But this is not so. I recognise that the work done by the teachers in this country is like the work done by the builders of the great cathedrals of the Middle Ages. The work done by these men has been wonderful; it still remains the admiration of successive generations, and yet not only the names of the workmen, but even of the architects, are often buried in oblivion. Often these men must have been vexed and grieved that they could not carry on their work as they would for want of funds, because we frequently note that the great cathedrals have been built bit by bit, with long intervals between.

CO-OPERATION OF WORKERS.

You are doing a great work, and it is not with the desire of putting heavier burdens upon you that I make these proposals

to-day, but it is with the desire of getting every class in this country to co-operate with you, to be fellow-helpers, that the doctors may aid you with their advice, the lady visitors by looking after your pupils in their homes, mayors, provosts, town councils, squires, rich men by providing proper schools accommodation and playgrounds, and the legislative bodies of the country by giving heed to your representation and carrying out the measures you know to be required. It is evident that such a work as this requires the co-operation of all classes, and it is with a view of obtaining this that a National League for Physical Education and Improvement has been proposed. You have already done an enormous amount of work, very often not only without proper reward, but even in spite of discouragement. You have already shown what you have done for the rising generation, how much you have the mental and bodily welfare of the nation at heart, and if the teachers of this country approve of the National League and give to it their sympathy and help, I am certain that the success of the League will be assured.

PROPOSED LEAGUE.

But I wish you, ladies and gentlemen, to note that this League is not brought before you as a full-grown institution, which you are only asked to forward. It is still only a *proposed* League; it is still in its infancy; it has not yet been brought formally before the public. The draft scheme is in your hands, but it contains only the general outlines, and requires to be worked out in detail. Your experience, your advice, your help, are all required in order that it shall be worked out on proper lines, and therefore it seems right and fitting that it should be submitted to this body before it is brought to the notice of the general public. In forming a Federation of the Associations of Head Teachers you have already begun the work proposed by the National League, for its great object is the co-ordination and extension of those bodies which are already at work for the good of the people. By getting all such bodies to work together we hope that each

rising generation in this country will become stronger, wiser, and better than the preceding one, and I thank you most sincerely, ladies and gentlemen, for the opportunity of bringing before you a scheme which, with your help, may do much to bring about such a desirable result. But please observe, ladies and gentlemen, that both your help and sympathy are needed and that your assistance is required.

HARRISON AND SONS,
PRINTERS IN ORDINARY TO HIS MAJESTY,
ST. MARTIN'S LANE, LONDON, W.C.

